Release notes for ENDF/B Development n-095_Am_244 evaluation

April 26, 2017

- **checkr** Warnings:

  1. A previous error halted parsing of the current section
     MAT=9552, MF= 1, MT=451 (1): Parsing stopped

     ```
     ERROR(S) FOUND IN MAT=9552, MF= 1, MT=451
         SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER     151 TO     227
     ```

- **checkr** Errors:

  1. A variable is outside the allowed ENDF range
     MAT=9552, MF= 1, MT=451 (0): Variable range

     ```
     ERROR(S) FOUND IN MAT=9552, MF= 1, MT=451
         MOD =    1 OUT OF RANGE    0 -    0          RECORD NUMBER     151
     ```

  2. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=9552, MF= 1, MT=452 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=9552, MF= 1, MT=452
         SECTION  1/452 NOT IN DIRECTORY              RECORD NUMBER     228
     ```

  3. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=9552, MF= 1, MT=455 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=9552, MF= 1, MT=455
         SECTION  1/455 NOT IN DIRECTORY              RECORD NUMBER     234
     ```

  4. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=9552, MF= 1, MT=456 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=9552, MF= 1, MT=456
         SECTION  1/456 NOT IN DIRECTORY              RECORD NUMBER     242
     ```

  5. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=9552, MF= 1, MT=458 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=9552, MF= 1, MT=458
         SECTION  1/458 NOT IN DIRECTORY              RECORD NUMBER     247
     ```

  6. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=9552, MF= 2, MT=151 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=9552, MF= 2, MT=151
         SECTION  2/151 NOT IN DIRECTORY              RECORD NUMBER     260
     ```

  7. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=9552, MF= 3, MT= 1 (0): Directory (b)

1

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT=  1
        SECTION  3/  1 NOT IN DIRECTORY                 RECORD NUMBER      266
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=9552, MF= 3, MT= 2 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT=  2
        SECTION  3/  2 NOT IN DIRECTORY                 RECORD NUMBER      341
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=9552, MF= 3, MT= 4 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT=  4
        SECTION  3/  4 NOT IN DIRECTORY                 RECORD NUMBER      371
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 16 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 16
        SECTION  3/ 16 NOT IN DIRECTORY                 RECORD NUMBER      396
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 17 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 17
        SECTION  3/ 17 NOT IN DIRECTORY                 RECORD NUMBER      406
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 18 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 18
        SECTION  3/ 18 NOT IN DIRECTORY                 RECORD NUMBER      414
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 37 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 37
        SECTION  3/ 37 NOT IN DIRECTORY                 RECORD NUMBER      478
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 51 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 51
        SECTION  3/ 51 NOT IN DIRECTORY                 RECORD NUMBER      484
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 52 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 52
        SECTION  3/ 52 NOT IN DIRECTORY                 RECORD NUMBER    509
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 53 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 53
        SECTION  3/ 53 NOT IN DIRECTORY                 RECORD NUMBER    533
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 54 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 54
        SECTION  3/ 54 NOT IN DIRECTORY                 RECORD NUMBER    557
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 55 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 55
        SECTION  3/ 55 NOT IN DIRECTORY                 RECORD NUMBER    580
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 56 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 56
        SECTION  3/ 56 NOT IN DIRECTORY                 RECORD NUMBER    603
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 57 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 57
        SECTION  3/ 57 NOT IN DIRECTORY                 RECORD NUMBER    626
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 58 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 58
        SECTION  3/ 58 NOT IN DIRECTORY                 RECORD NUMBER    648
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 59 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 59
        SECTION  3/ 59 NOT IN DIRECTORY                 RECORD NUMBER    670
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 60
            SECTION  3/ 60 NOT IN DIRECTORY                RECORD NUMBER     691
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 61
            SECTION  3/ 61 NOT IN DIRECTORY                RECORD NUMBER     712
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 62
            SECTION  3/ 62 NOT IN DIRECTORY                RECORD NUMBER     732
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 63 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 63
            SECTION  3/ 63 NOT IN DIRECTORY                RECORD NUMBER     752
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 64 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 64
            SECTION  3/ 64 NOT IN DIRECTORY                RECORD NUMBER     771
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 65 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 65
            SECTION  3/ 65 NOT IN DIRECTORY                RECORD NUMBER     790
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 66 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 66
            SECTION  3/ 66 NOT IN DIRECTORY                RECORD NUMBER     809
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 67 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 67
            SECTION  3/ 67 NOT IN DIRECTORY                RECORD NUMBER     827
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 68 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 68
          SECTION  3/ 68 NOT IN DIRECTORY              RECORD NUMBER    845
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 69 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 69
          SECTION  3/ 69 NOT IN DIRECTORY              RECORD NUMBER    863
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 70 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 70
          SECTION  3/ 70 NOT IN DIRECTORY              RECORD NUMBER    880
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 71 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 71
          SECTION  3/ 71 NOT IN DIRECTORY              RECORD NUMBER    897
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 72 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 72
          SECTION  3/ 72 NOT IN DIRECTORY              RECORD NUMBER    913
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 73 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 73
          SECTION  3/ 73 NOT IN DIRECTORY              RECORD NUMBER    929
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 74 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 74
          SECTION  3/ 74 NOT IN DIRECTORY              RECORD NUMBER    945
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 75 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 75
          SECTION  3/ 75 NOT IN DIRECTORY              RECORD NUMBER    960
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 3, MT= 91
    SECTION  3/ 91 NOT IN DIRECTORY                RECORD NUMBER     975
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 3, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 3, MT=102
    SECTION  3/102 NOT IN DIRECTORY                RECORD NUMBER     990
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 4, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT=  2
    SECTION  4/  2 NOT IN DIRECTORY                RECORD NUMBER    1022
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 4, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 16
    SECTION  4/ 16 NOT IN DIRECTORY                RECORD NUMBER    1261
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 4, MT= 17 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 17
    SECTION  4/ 17 NOT IN DIRECTORY                RECORD NUMBER    1272
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 4, MT= 18 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 18
    SECTION  4/ 18 NOT IN DIRECTORY                RECORD NUMBER    1283
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 4, MT= 37 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 37
    SECTION  4/ 37 NOT IN DIRECTORY                RECORD NUMBER    1294
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 4, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 51
    SECTION  4/ 51 NOT IN DIRECTORY                RECORD NUMBER    1305
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 4, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 52
    SECTION  4/ 52 NOT IN DIRECTORY              RECORD NUMBER    1334
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 53$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 53
    SECTION  4/ 53 NOT IN DIRECTORY              RECORD NUMBER    1363
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 54$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 54
    SECTION  4/ 54 NOT IN DIRECTORY              RECORD NUMBER    1392
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 55$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 55
    SECTION  4/ 55 NOT IN DIRECTORY              RECORD NUMBER    1421
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 56$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 56
    SECTION  4/ 56 NOT IN DIRECTORY              RECORD NUMBER    1450
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 57$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 57
    SECTION  4/ 57 NOT IN DIRECTORY              RECORD NUMBER    1479
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 58$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 58
    SECTION  4/ 58 NOT IN DIRECTORY              RECORD NUMBER    1508
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 59$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 59
    SECTION  4/ 59 NOT IN DIRECTORY              RECORD NUMBER    1537
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 60$ (0): Directory (b)

7

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 60
          SECTION  4/ 60 NOT IN DIRECTORY              RECORD NUMBER    1566
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 61$ (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 61
          SECTION  4/ 61 NOT IN DIRECTORY              RECORD NUMBER    1595
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 62$ (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 62
          SECTION  4/ 62 NOT IN DIRECTORY              RECORD NUMBER    1624
```

58. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 63$ (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 63
          SECTION  4/ 63 NOT IN DIRECTORY              RECORD NUMBER    1653
```

59. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 64$ (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 64
          SECTION  4/ 64 NOT IN DIRECTORY              RECORD NUMBER    1682
```

60. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 65$ (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 65
          SECTION  4/ 65 NOT IN DIRECTORY              RECORD NUMBER    1711
```

61. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 66$ (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 66
          SECTION  4/ 66 NOT IN DIRECTORY              RECORD NUMBER    1740
```

62. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 67$ (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 67
          SECTION  4/ 67 NOT IN DIRECTORY              RECORD NUMBER    1769
```

63. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=9552$, $MF= 4$, $MT= 68$ (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 68
   SECTION  4/ 68 NOT IN DIRECTORY                RECORD NUMBER    1798
```

64. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 69\ (0){:}\ Directory\ (b)$

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 69
   SECTION  4/ 69 NOT IN DIRECTORY                RECORD NUMBER    1827
```

65. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 70\ (0){:}\ Directory\ (b)$

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 70
   SECTION  4/ 70 NOT IN DIRECTORY                RECORD NUMBER    1856
```

66. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 71\ (0){:}\ Directory\ (b)$

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 71
   SECTION  4/ 71 NOT IN DIRECTORY                RECORD NUMBER    1885
```

67. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 72\ (0){:}\ Directory\ (b)$

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 72
   SECTION  4/ 72 NOT IN DIRECTORY                RECORD NUMBER    1914
```

68. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 73\ (0){:}\ Directory\ (b)$

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 73
   SECTION  4/ 73 NOT IN DIRECTORY                RECORD NUMBER    1943
```

69. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 74\ (0){:}\ Directory\ (b)$

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 74
   SECTION  4/ 74 NOT IN DIRECTORY                RECORD NUMBER    1972
```

70. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 75\ (0){:}\ Directory\ (b)$

```
ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 75
   SECTION  4/ 75 NOT IN DIRECTORY                RECORD NUMBER    2001
```

71. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT{=}9552,\ MF{=}\ 4,\ MT{=}\ 91\ (0){:}\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=9552, MF= 4, MT= 91
            SECTION  4/ 91 NOT IN DIRECTORY                  RECORD NUMBER    2030
```

72. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 5, MT= 16 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 5, MT= 16
            SECTION  5/ 16 NOT IN DIRECTORY                  RECORD NUMBER    2060
```

73. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 5, MT= 17 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 5, MT= 17
            SECTION  5/ 17 NOT IN DIRECTORY                  RECORD NUMBER    2078
```

74. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 5, MT= 18 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 5, MT= 18
            SECTION  5/ 18 NOT IN DIRECTORY                  RECORD NUMBER    2101
```

75. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 5, MT= 37 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 5, MT= 37
            SECTION  5/ 37 NOT IN DIRECTORY                  RECORD NUMBER    2109
```

76. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=9552, MF= 5, MT= 91 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=9552, MF= 5, MT= 91
            SECTION  5/ 91 NOT IN DIRECTORY                  RECORD NUMBER    2135
```

- `fudge-4.0` Warnings:

   1. Cross section does not match sum of linked reaction cross sections
      crossSectionSum label 0: total (Error # 0): CS Sum.

      ```
      WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.16%
      ```

   2. Cross section does not match sum of linked reaction cross sections
      crossSectionSum label 1: (z,n) (Error # 0): CS Sum.

      ```
      WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.11%
      ```

- `fudge-4.0` Errors:

   1. ENDF format insists that all outgoing fission neutrons, delayed or otherwise, have spectra. For delayed neutrons this is tough.
      Reading ENDF file: ../n-095_Am_244.endf (Error # 0): No delayed n dist

```
WARNING: More than one delayed fission neutron decay time but no MF = 5 data
```

2. Found a negative probability
   reaction label 0: n + Am244 / Product: n / Distribution: / angularTwoBody - XYs2d: (Error # 0): Negative prob.

```
WARNING: Negative probabilities encountered. Incident energy: 1.9e7 eV, worst case: -0.000163887330739
WARNING: Negative probabilities encountered. Incident energy: 2.e7 eV, worst case: -0.00208568586035
```

3. Calculated and tabulated Q values disagree.
   reaction label 27: n[multiplicity:'2'] + Am243 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -5042795.754547119 eV vs -5363190. eV!
```

4. Calculated and tabulated Q values disagree.
   reaction label 28: n[multiplicity:'3'] + Am242 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -11407689.67797852 eV vs -1.17275e7 eV!
```

5. Weights in a weighted sum don't sum up to one
   reaction label 28: n[multiplicity:'3'] + Am242 / Product: n / Distribution: / uncorrelated - energy - weightedFunctionals: (Error # 0): Bad weight sum

```
WARNING: Weights don't sum to 1.0!
```

6. Calculated and tabulated Q values disagree.
   reaction label 29: n[multiplicity:'4'] + Am241 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -16945329.32720947 eV vs -1.72687e7 eV!
```

7. Calculated and tabulated Q values disagree.
   reaction label 31: Am245 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 6376201.121276855 eV vs 6052990. eV!
```

- `njoy2012` Warnings:

  1. Evaluation has no resonance parameters given
     unresr...calculation of unresolved resonance cross sections (0): No RR

```
     ---message from unresr---mat 9552 has no resonance parameters
                         copy as is to nout
```

  2. There is a problem with the fission energy release.
     heatr...prompt kerma (0): HEATR/nheat (3)

```
     ---message from nheat---changed q from   2.045207E+08 to   1.941606E+08
                         for mt  18
```

  3. Evaluation has no resonance parameters given
     purr...probabalistic unresolved calculation (0): No RR

```
     ---message from purr---mat 9552 has no resonance parameters
                         copy as is to nout
```

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

   ```
        ---message from conver---cannot do complete particle production for mt= 16
                            only mf4/mf5 provided
   ```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

   ```
        ---message from conver---cannot do complete particle production for mt= 17
                            only mf4/mf5 provided
   ```

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

   ```
        ---message from conver---cannot do complete particle production for mt= 37
                            only mf4/mf5 provided
   ```

7. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

   ```
        ---message from conver---cannot do complete particle production for mt= 91
                            only mf4/mf5 provided
   ```

- `njoy2012` Errors:

   1. An angular distribution is negative
      acer...monte carlo neutron and photon data (0): Neg. P(Ejµ) (b)

      ```
           ---message from ptleg2---negative probs found
                              13 for mt=  2 e= 1.900E+07
      ```

   2. An angular distribution is negative
      acer...monte carlo neutron and photon data (1): Neg. P(Ejµ) (b)

      ```
           ---message from ptleg2---negative probs found
                              41 for mt=  2 e= 2.000E+07
      ```

- `acelst` Warnings:

   1. generic warning message
      0: Warning

```
        ACELST WARNING - More than one range for MF/MT         6          16
        ACELST WARNING - More than one range for MF/MT         6          17
```

2. generic warning message
   1: Warning

```
        ACELST WARNING - More than one range for MF/MT         6          37
        STOP ACELST Completed
```

- xsectplotter   Errors:

1. ENDF format insists that all outgoing fission neutrons, delayed or otherwise, have spectra. For delayed neutrons this is tough.
   (Error # 2): No delayed n dist

```
        WARNING: More than one delayed fission neutron decay time but no MF = 5 data
```